

### **AMENDMENTS TO THE SPECIFICATION**

Please amend the specification as follows.

Please replace the paragraph on page 12, beginning on line 25, with the following amended paragraph:

Conversely, the WAP gateway 205 also performs the translation of WAP commands into HTTP requests which can be sent over the public Internet. The WAP gateway 205 can also store user's bookmarks, two of which could point to the wireless server's messaging and other resource services. The wireless server 210 communicates Wireless Markup Language (WML) over HTTP on the front-end and communicates in the native protocol of the target server on the back-end.

Please replace the paragraph on page 13, beginning on line 5, with the following amended paragraph:

The wireless server 210 communicates to these back-end resource servers using the backend server's native protocol. For example, the wireless server 210 may communicate to resource server A 211 which may be a messaging server using IMAP. Lightweight Directory Access Protocol (LDAP) is used for all communications to and from the resource server B 212. And an Extensible Markup Language (XML) protocol may be used to communicate with resource server C 213.

Please replace the paragraph on page 13, beginning on line 12, with the following amended paragraph:

Although the wireless server 210 depicted in Figure 2 is capable of communicating in these native protocols shown in Figure 2, the wireless server protocol's handling capability can be extended to support other protocols. The wireless server implements the WML interface and generates the corresponding WML content based on what it receives from the back-end server. The wireless environment depicted in Figure 2 typically supports a wireless device of dissimilar configuration and is thus device independent.

Please replace the paragraph on page 14, beginning on line 1, with the following amended paragraph:

The wireless server 210 shown in Figure 3 is ~~[[a]]~~ flexible, scalable, extensible, and capable of supporting a rich evolving range of networks such as Global System for Mobile communication (GSM) Network, Code Division Multiple Access (CDMA) Networks, Time Division Multiple Access (TDMA) Networks, Third Generation (3G) Networks and others.

Please replace the paragraph on page 14, beginning on line 14, with the following amended paragraph:

AS 310 is the first part of the wireless server 210 that comes into contact with the end-user. AS 310 receives client service requests to WS 210 via a client authentication software APIs and importantly authenticates such requests. AS 310 verifies the identity of a user, creates and validates a portal session, and redirects the user's client to an appropriate wireless application. As used throughout this application, a "client" refers to an independent wireless device~~[[s]]~~ which may connect to the wireless server.

Please replace the paragraph on page 14, beginning on line 24, with the following amended paragraph:

Depending upon the Uniform Resource Locator (URL) given, the end-user will either see a menu displaying all the registered authentication modules on the end-user's wireless client available for use or they are automatically linked to a specific ~~logging-in module~~ service 325 pre-designated for a particular class of client type. AS 310 uses client-type information received from Client Detection module 350 in determining the appropriate service module to invoke in response to the client request. The Function of the Client Detection module 350 is described in the copending US Patent Application entitled "CLIENT AWARE DETECTION IN AWIRELESS PORTAL SYSTEM", filed on August 13, 2001, assigned to the assignee of the present invention and ~~hereby~~ incorporated herein by reference.

Please replace the paragraph on page 16, beginning on line 6, with the following amended paragraph:

These individual authentication modules include predefined client characteristics which may be equipment manufacturer specific or service provider specific. Some of the client characteristics which may be used to authenticate a client include~~[[s]]~~ client's browser type, client's browser version, type of wireless service the client subscribes from a service provider and the time of day such services are subscribed, the user's user-id and password. The

authentication modules may also include LDAP authentication, secure ID, radius authentication, UNIX authentication, membership authentication, etc.

Please replace the paragraph on page 16, beginning on line 15, with the following amended paragraph:

When the authenticating service 310 receives client initiated authentication requests, the authenticating service[[s]] 310 invokes the appropriate authentication module from Modules 410 to load files based on the client accessing the server 210. In the prior art, most authentication requests to the wireless server 210 were assumed to emanate from HTML based devices. Prior art clients were therefore authenticated based on only the user name and password. On the other hand, the present authenticating procedure utilizes client characteristics other than the user name and password to verify authentication requests.